

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[PA 116/121/154/-4129; FRL- ]**

**Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania;  
Rate of Progress Plan for Pennsylvania Portion of the  
Philadelphia-Wilmington-Trenton Ozone Nonattainment Area**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing to approve State Implementation Plan (SIP) revisions submitted by the Commonwealth of Pennsylvania consisting of the 1999, 2002, and 2005 rate of progress (ROP) plans for the Pennsylvania portion of the Philadelphia-Wilmington -Trenton Ozone Nonattainment Area (the Philadelphia area). Rate of progress plans are required by the Clean Air Act (the Act) to ensure progress in reducing emissions of ozone precursors. The intended effect of this action is to propose approval of the ROP plans submitted by the Pennsylvania Department of Environmental Protection (PADEP) to reduce volatile organic compounds (VOCs) and oxides of nitrogen (NOx), which contribute to the formation of ground level ozone. EPA is withdrawing the previous proposed approval of the Pennsylvania post-1996 ROP plan, published on August 25, 1999.

**DATES:** Written comments must be received on or before [insert date 30 days from date of publication].

**ADDRESSES:** Written comments may be mailed to David L. Arnold, Chief, Air Quality Planning and Information Services Branch, Mailcode 3AP21, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; Pennsylvania Department of Environmental Protection, Bureau of Air Quality, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.

**FOR FURTHER INFORMATION CONTACT:** Jill Webster, (215) 814-2033 or by e-mail at Webster.Jill@epa.gov. Please note that while questions may be posed via telephone and e-mail, formal comments must be submitted, in writing, as indicated in the ADDRESSES section of this document.

**SUPPLEMENTARY INFORMATION:**

The Commonwealth submitted the required ROP plans in two phases. The first plan, submitted on July 31, 1998, consists of a 9 percent reduction in ozone precursors from November 1996 to November 1999. On April 30, 1998, the Commonwealth submitted the second of the ROP plans, which consists of an additional 3 percent per year reduction in ozone precursors demonstrated for milestone years 2002 and 2005. The April 30, 1998 submittal also included an attainment demonstration for the Philadelphia area, which is the subject of a separate rulemaking action. On February 25, 2000, the Commonwealth amended the SIP pertaining to the motor vehicle emissions reductions and budgets for the Philadelphia area. Henceforth, each ROP plan

shall be referred to by its respective milestone year, either 1999, 2002 and 2005; and the three plans collectively shall be referred to as the post-1996 ROP plans. These post-1996 plans collectively demonstrate ROP from November 1996 through November 2005.

## **I. Background**

The Act requires serious and above ozone nonattainment areas to develop post-1996 ROP plans to reduce area-wide VOC emissions after 1996 by 3 percent per year averaged over consecutive 3- year periods, until the attainment year for that area. In this case, the Philadelphia area has submitted a SIP establishing an attainment date of 2005, the outside attainment date for areas classified as severe-15. This 3 percent per year reduction requirement is a continuation of the requirement for a 15 percent reduction in VOC by 1996. For the post-1996 ROP plans, the Act allows for the substitution of NO<sub>x</sub> emission reductions in lieu of VOC emission reductions so long as reductions in both precursors are beneficial for reducing ozone levels. EPA has issued guidance applicable to the appropriate ratio of NO<sub>x</sub> to VOC. Our assessment of the post-1996 ROP plans is to determine whether or not the 3 percent per year reduction requirement is met.

**II. Calculation of the 3 Percent Per Year Reduction** - An ROP plan consists of a plan to achieve a target level of emissions. There are several important emissions inventories and calculations associated with the plan. These include: the base year emission inventory, future year projection inventories, and target level calculations. Each of these is described below.

**A. Base Year Emission Inventory** - EPA approved the 1990 base year VOC emissions

EPA granted conditional approval of Pennsylvania's 15 percent plan for the Philadelphia area on June 9, 1997 [62 FR 31343]. On May 16, 2001 [66 FR 27051], EPA published a notice of proposed rulemaking (NPR) to convert its prior conditional approval of Pennsylvania's 15 percent plan SIP for the Philadelphia area to full approval. No public comments were submitted on the NPR, and EPA expects to issue soon a final rule converting its conditional approval of the 15 percent plan to full approval. In its 15 percent plan, the PADEP calculated the 15 percent ROP target level to be 494 tons per day (TPD).

Pennsylvania has elected to substitute NO<sub>x</sub> for VOC emissions reductions in the milestone years of 1999, 2002, and 2005 for the Philadelphia area. In Pennsylvania's plans, growth in VOC emissions is offset by VOC emissions reductions achieved by 2005. Similarly, growth in NO<sub>x</sub> emissions is offset by NO<sub>x</sub> emissions reductions achieved in that same time period.

Pennsylvania did not calculate separate VOC and NO<sub>x</sub> target levels. However, EPA has been able to calculate VOC and NO<sub>x</sub> target levels using data in Pennsylvania's ROP plans. The calculations for the 1999 milestone year are shown in Table 1 below.

**Table 1. Target Level and Emission Reduction Needs for the Philadelphia Area Through 1999 (tons/day)**

<b>VOC</b>	
1. 1990 ROP base year inventory = 1990 base year inventory - biogenic emissions	$732 - 116 = 616$
2. 1990 adjusted base year inventory = 1990 ROP base year inventory - 1990 to 1999 FMVCP/RVP reductions	$616 - 39 = 576$
3. Required Reductions = $0.0\% \times$ 1990 adjusted base year inventory	$0\% \times 576 = 0$
4. 1999 target level = 1996 target - required reduction - fleet turnover correction	$494 - 0 - 6 = 488$
5. Reduction needed to offset VOC growth = 1999 uncontrolled emissions - 1999 target	$625 - 488 = 137$
<b>NO<sub>x</sub></b>	
1. 1990 ROP base year inventory (sum of all point, area, and mobile source emission)	440
2. 1990 adjusted base year inventory = 1990 ROP base year inventory - 1990 to 1999 FMVCP/RVP reductions	$440 - 20 = 420$
3. Required reduction = $9\% \times$ 1990 adjusted base year inventory	$9\% \times 420 = 38$
4. 1999 ROP target level = 1990 ROP base year inventory - required reduction - 1990 to 1999 FMVCP/RVP reductions	$440 - 38 - 20 = 382$
5. Reductions needed for ROP and to offset NO <sub>x</sub> growth = 1999 uncontrolled emissions - 1999 target	$455 - 382 = 73$

Using the target levels calculated for 1999, EPA was able to calculate NO<sub>x</sub> and VOC reductions needed for following milestone years 2002 and 2005. The calculations for each milestone are summarized in Table 2 below.

**Table 2. Reductions in VOC and NO<sub>x</sub> Needed for Milestone Years 1999, 2002 and 2005 (tons/day)**

<b>Milestone and Assumed Reduction</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>
1999 (9% ROP = 0% VOC + 9 % NO <sub>x</sub> )	137	73
2002 (9% ROP = 5% VOC + 4% NO <sub>x</sub> )	179	99
2005 (9% ROP = 4% VOC + 5% NO <sub>x</sub> )	216	129

**C. Growth Projections** - States must include control measures in their ROP plans to offset the emissions growth projected to occur through the final milestone year. In this case, the Commonwealth must project growth in emissions that occur from 1996 through 2005. To meet the average 3 percent per year requirement, the Commonwealth must enact measures achieving sufficient emissions reductions to offset the projected growth in emissions, in addition to achieving a 3 percent per year reduction of NO<sub>x</sub>/VOC emissions from 1996 through 2005. Growth must be determined separately for each source or source category, since sources typically grow at different rates. The post-1996 ROP plans submitted by PADEP for the Philadelphia area contain growth projections for stationary, area, on-road, and non-road sources using acceptable growth factor methodologies. A more detailed description of the Commonwealth's submittals and EPA's evaluation are included in a Technical Support Document (TSD) prepared in support of this rulemaking action. A copy of the TSD is available, upon request, from the EPA Regional Office listed in the ADDRESSES section of this document. EPA has determined that the Commonwealth's growth projection methodologies are acceptable for growth factor estimation.

### **III. The Control Strategies Included in the 1999, 2002, and 2005 ROP Plans**

The purpose of the ROP plans is to demonstrate how the state has reduced emissions by 3 percent per year as averaged over each 3 year period between November 1996 and November 2005. In general, reductions toward ROP requirements are creditable, provided the control measure was implemented after 1990 and the resulting reductions are real, permanent, and Federally enforceable. Each control measure is described in detail in the TSD for this action. Table 3, below, summarizes the measures PADEP relies upon to demonstrate ROP for the applicable milestone years.

**Table 3. Emission Reductions in the Philadelphia Post 1996 ROP Plans (tons/day)**

<b>Control Measure</b>	<b>VOC</b>			<b>NOx</b>		
	<b>1999</b>	<b>2002</b>	<b>2005</b>	<b>1999</b>	<b>2002</b>	<b>2005</b>
RFG	22.56	35.24	36.59	0.47	7.17	7.45
I/M	58.69	61.44	65.38	32.22	32.73	33.89
FMVCP and Tier 1	6.95	13.12	20.35	14.11	22.59	27.36
Stage II Vapor Recovery	17.71	19.82	21.25	---	---	---
OTC NOx MOU	---	---	---	27.37	30.82	34.20
RACT	9.82	10.11	10.42	3.63	3.72	3.81
Autobody Refinishing Coatings	5.95	6.07	6.12	---	---	---
Consumer Products	4.12	4.16	4.20	---	---	---
AIM coatings	7.33	7.38	7.43	---	---	---
TSDFs	9.52	9.61	9.70	---	---	---
Rule Effectiveness for Point Sources	---	16.17	16.45	---	---	---
Shutdowns	---	2.59	2.79	---	0.94	1.21
Compression-Ignition Engines	---	---	---	---	---	44.00
Spark-Ignition Engines	---	---	15.79	---	---	---
NLEV	—	1.01	2.85	---	1.69	4.71
Heavy-Duty Diesel Engine Standard	---	---	---	---	---	0.38
<b>Totals</b>	<b>142.65</b>	<b>186.72</b>	<b>219.32</b>	<b>77.8</b>	<b>99.66</b>	<b>157.01</b>



Based upon the measures listed in the above table and EPA's analysis of each measure, EPA has determined the post 1996 ROP plans submitted by PADEP achieve the required reductions. Thus, the Commonwealth's 1999, 2002, and 2005 ROP plans meet the aggregate 27 percent emission reduction requirement of the Act, by achieving 9 percent emissions reductions over each successive 3 year period.

#### **IV. The Transportation Conformity Budgets for the ROP Milestone Years**

Under EPA's transportation conformity rule, August 15, 1997 [62 FR 43779], the post-1996 ROP plans are considered control strategy SIPs. A control strategy SIP establishes budgets to which Federally funded and approved transportation projects and plans must conform. The ROP plans establish VOC and NOx budgets for the Philadelphia area that are applicable for 1999, 2002, and 2005. These budgets are applicable in later years in the absence of other applicable budgets. On February 25, 2000, the Commonwealth amended the motor vehicle emissions budgets for the applicable milestone years. Table 4, below, summarizes the revised motor vehicle emissions budgets of the ROP plans for the Philadelphia area. EPA determined the budgets identified below, adequate for use in conformity determinations on May 31, 2000 [65 FR 36438 published June 8, 2000]. That determination became effective on June 23, 2000.

**Table 4. Motor Vehicle Emissions Budgets for the Philadelphia area (tons/day)**

Milestone year	VOC	NOx
1999	88.6	109.6
2002	69.52	93.13
2005	61.76	86.42

#### **V. EPA's Evaluation of the Commonwealth SIP Revisions**

EPA's review of this material indicates that the Commonwealth has adopted, submitted and implemented adequate measures to achieve the post-1996 ROP reductions. EPA is proposing to approve the Pennsylvania post-1996 ROP plans submitted on April 30, 1998, July 31, 1998, and February 25, 2000 as SIP revisions. EPA is soliciting public comments on the issues concerning the post-1996 ROP plan. Any comments received before the close of the public comment period will be considered before taking final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to the EPA Regional office listed in the **ADDRESSES** section of this document. This includes those who submitted comments on the NPR published on August 25, 1999 [64 FR 46325], if they believe their comments are still germane in light of this newly proposed action.

#### **VI. Proposed Action**

EPA is proposing to approve the 1999, 2002, and 2005 ROP plans submitted by the Commonwealth of Pennsylvania on April 30, 1998, July 31, 1998, and February 25, 2000. By

proposing approval of the ROP plans submitted by the Commonwealth, EPA is also proposing to approve the motor vehicle emissions budgets contained in the February 25, 2000 SIP submittal for ROP and transportation conformity purposes. EPA is withdrawing the previous proposed approval of the Pennsylvania Post-1996 ROP plan, published on August 25, 1999 [64 FR 46325].

## **VII. Administrative Requirements**

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this proposed action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 Fed. Reg. 28355 (May 22, 2001)). This action merely proposes to approve state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). Because this rule proposes to approve pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4). This proposed rule also does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as

specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely proposes to approve a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This proposed rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant. In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this proposed rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings" issued under the executive order.

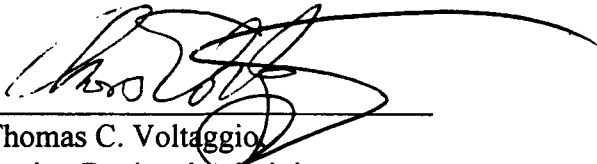
This proposed rule, regarding Pennsylvania's 1999, 2002, and 2005 ROP plans, does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Hydrocarbons, Nitrogen dioxide, Ozone.

**Authority:** 42 U.S.C. 7401 et seq.

08/16/01  
Dated:

  
Thomas C. Voltaggio  
Acting Regional Administrator,  
Region III.